

LINCOLN STREET BRIDGE & DAM IMPROVEMENTS

(DISTRICTS III & IV)





LINCOLN



**DOWNSTREAM
VIEW**

LINCOLN



N



FLOW



HISTORICAL INFORMATION



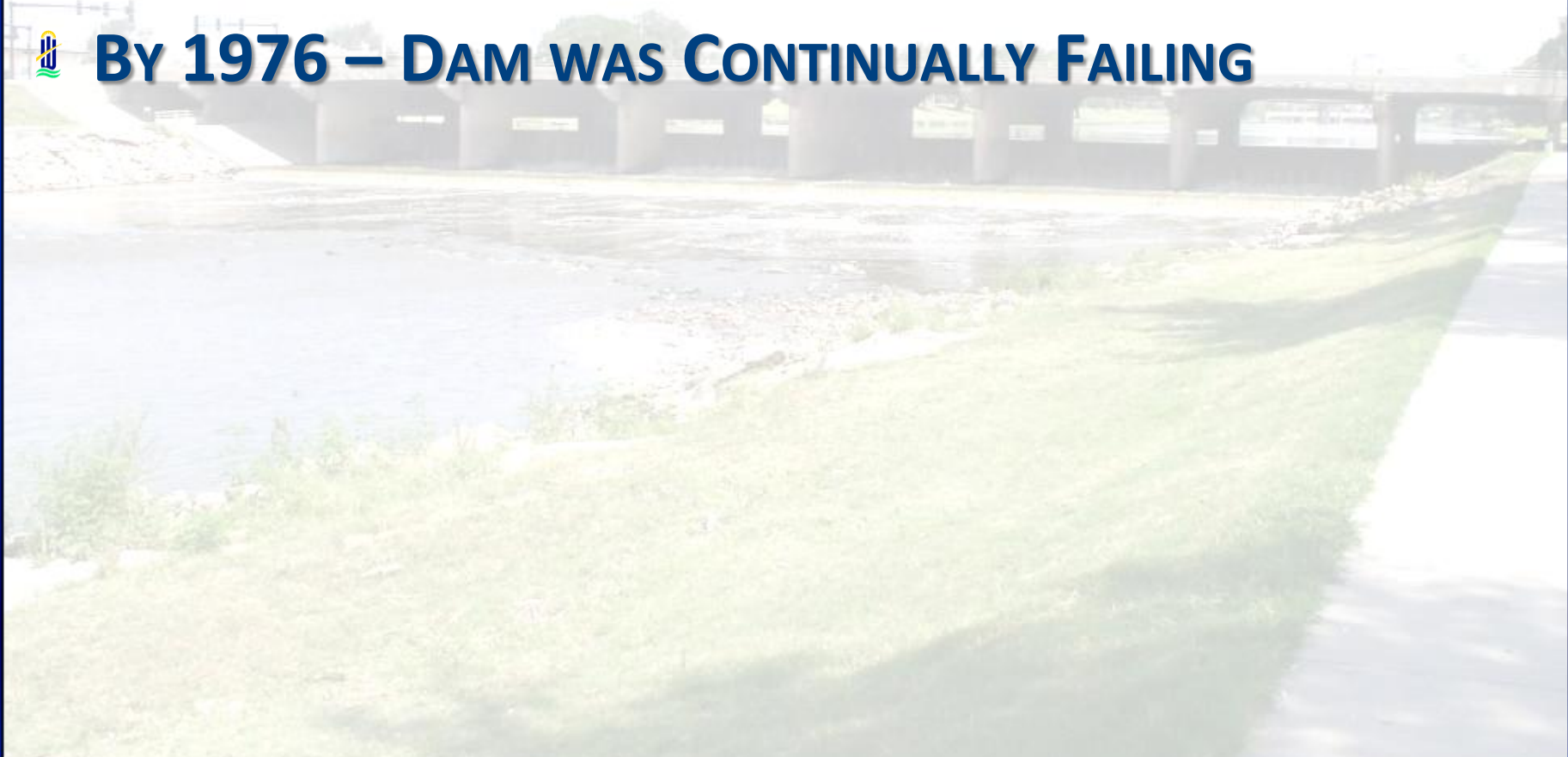
CURRENT BRIDGE BUILT 1970



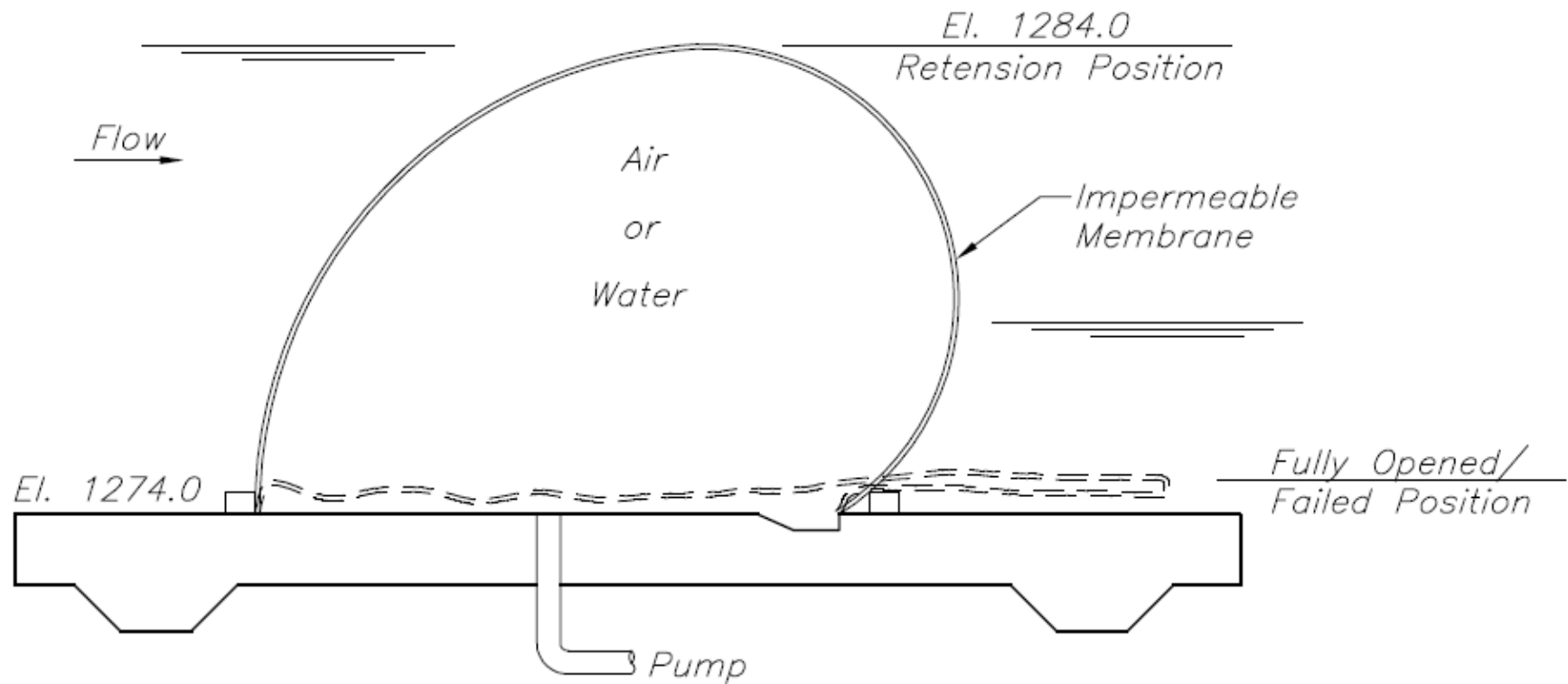
INFLATABLE DAM



BY 1976 – DAM WAS CONTINUALLY FAILING



ORIGINAL DAM DESIGN



HISTORY CONTINUED



1977



NEW MECHANICAL DAM CONSTRUCTED



FITTED WITHIN THE PIERS



CURRENT NEED FOR BRIDGE REPAIRS



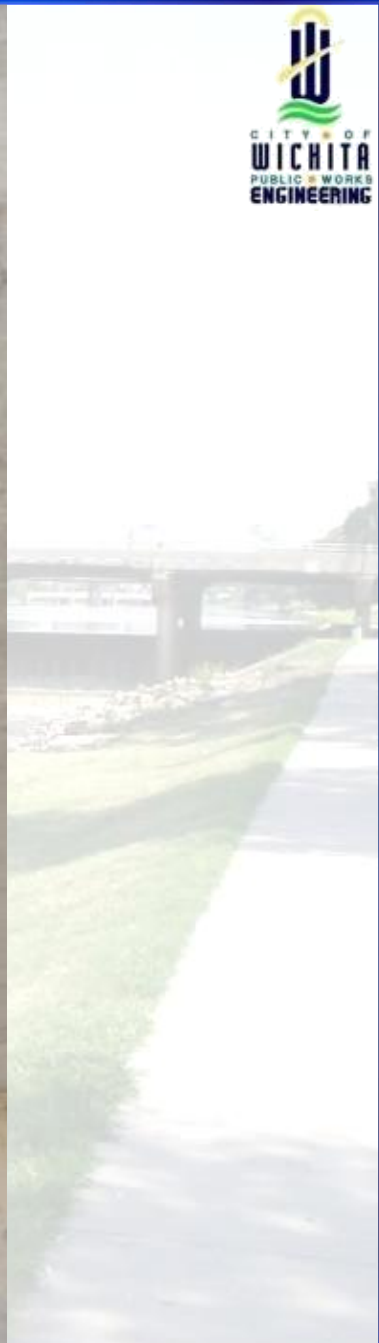






















ANALYSIS



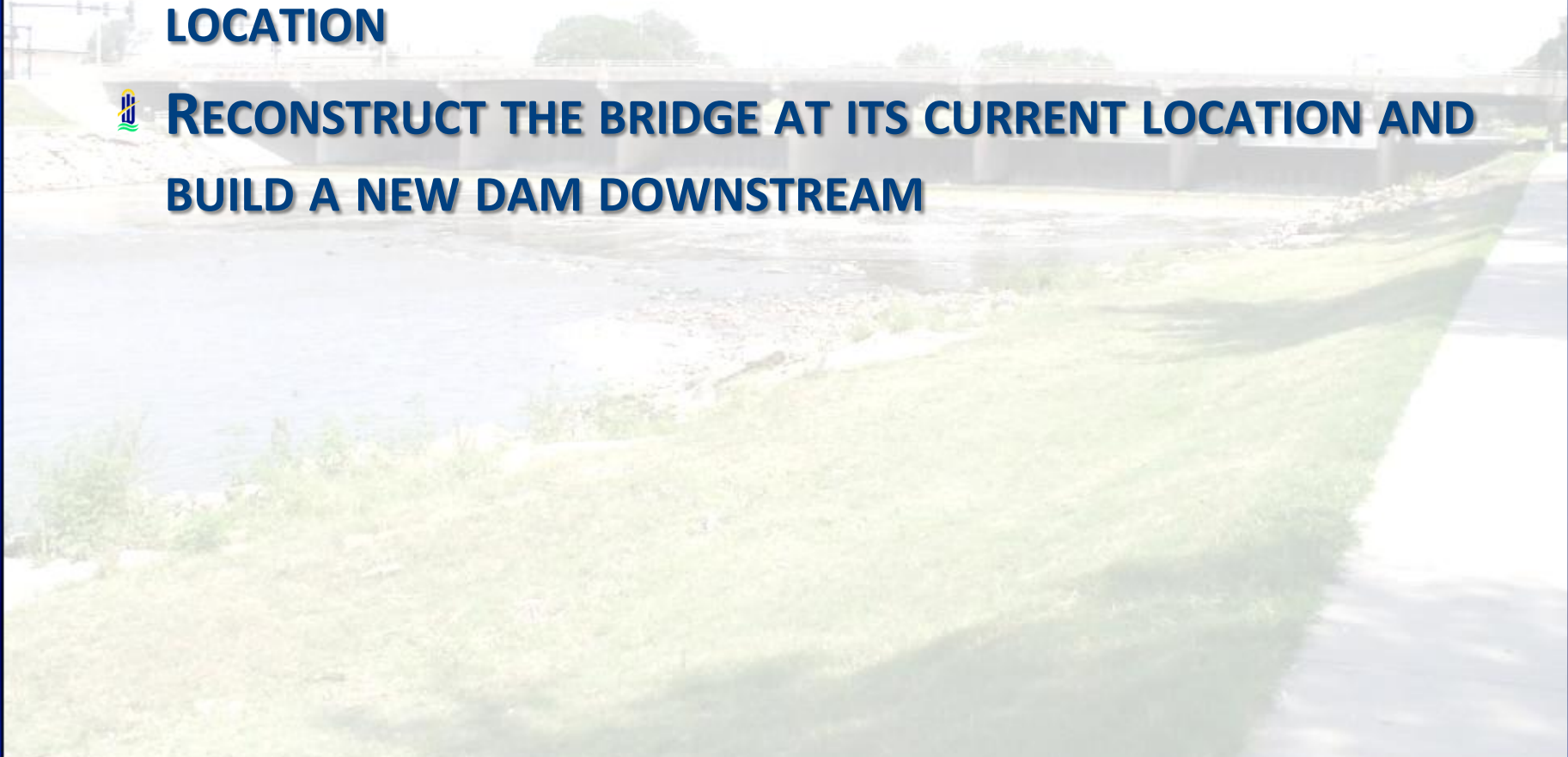
TWO DESIGN CONCEPTS HAVE BEEN IDENTIFIED



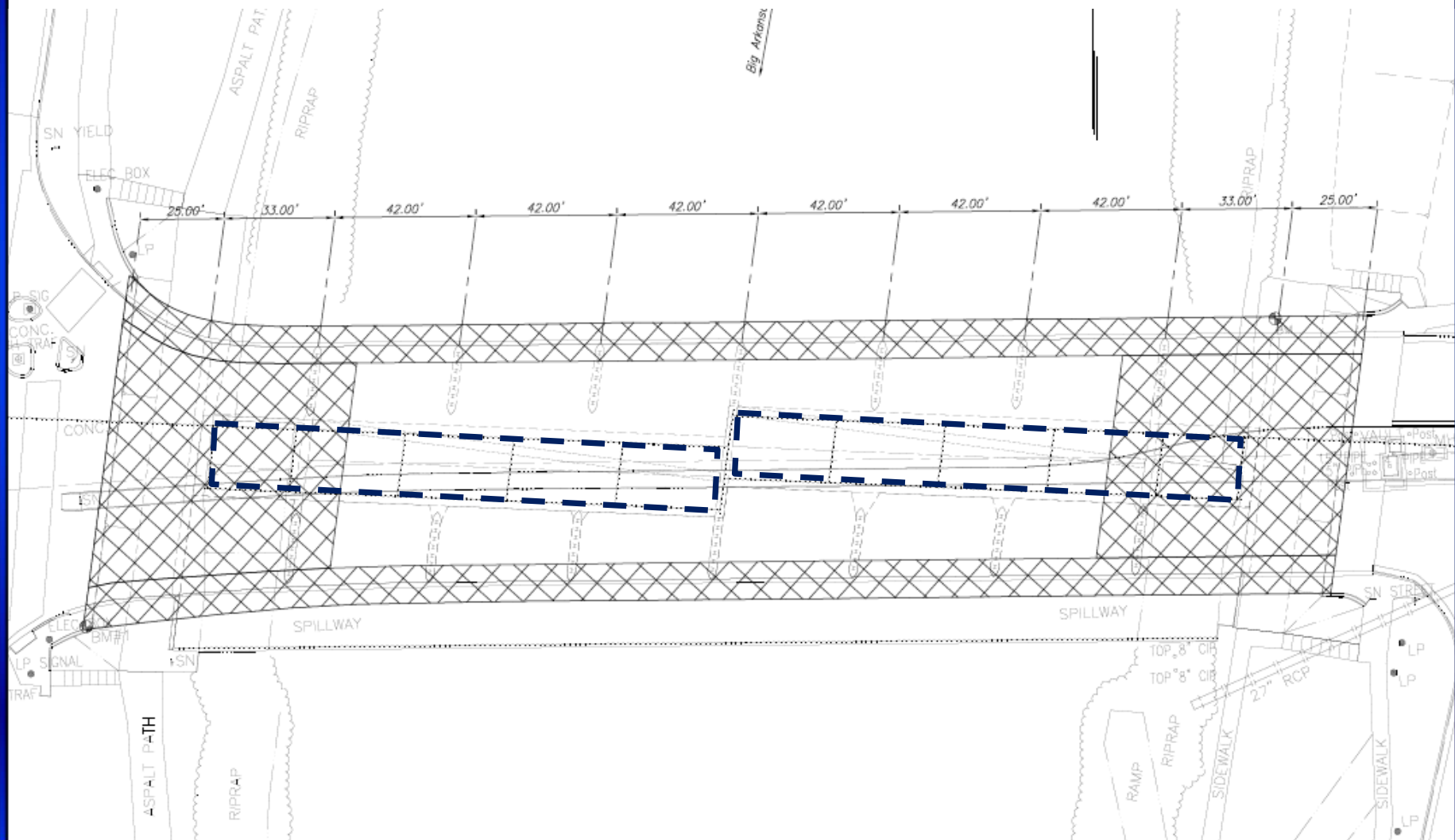
REHABILITATE THE BRIDGE AND DAM AT ITS CURRENT LOCATION

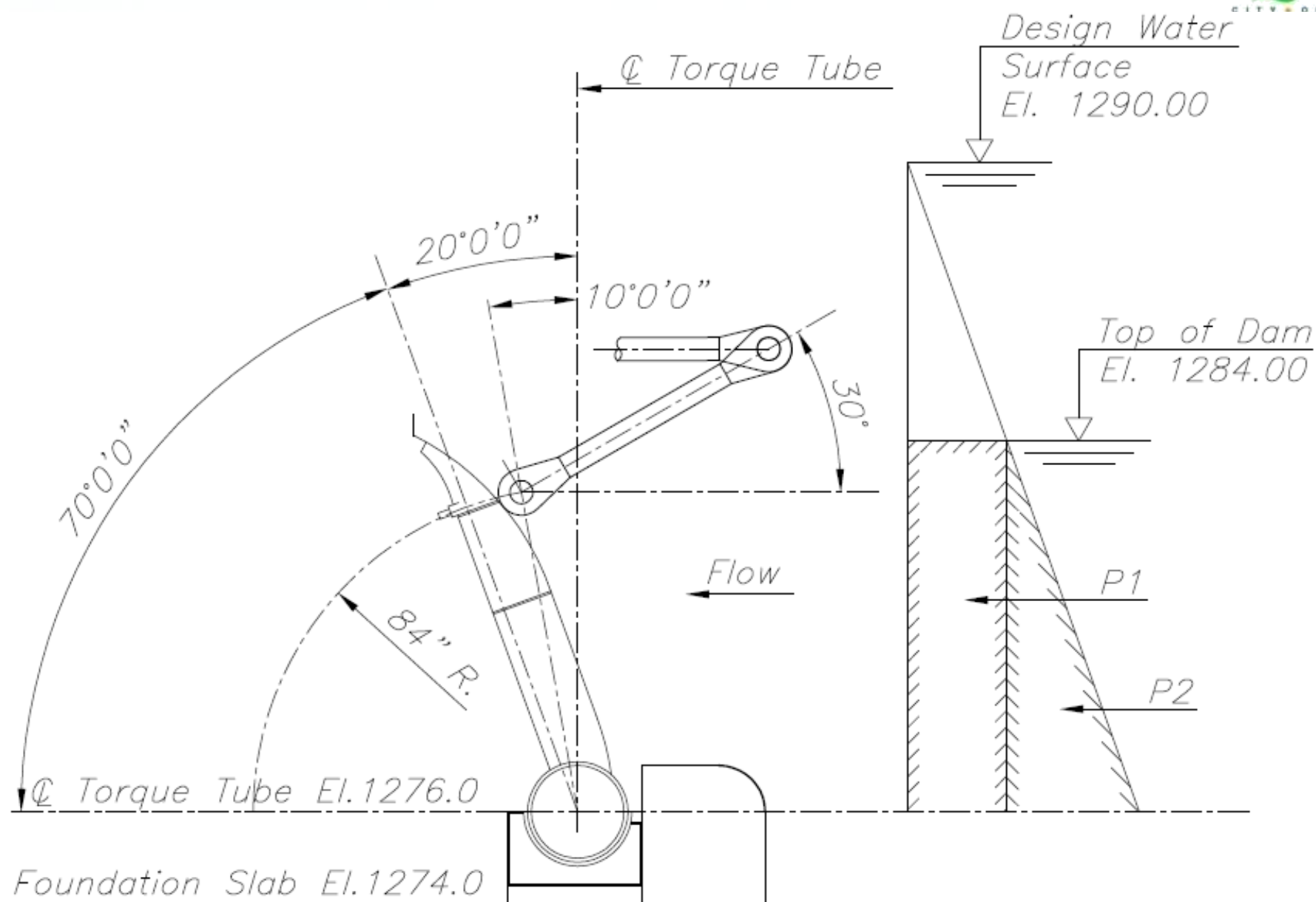


RECONSTRUCT THE BRIDGE AT ITS CURRENT LOCATION AND BUILD A NEW DAM DOWNSTREAM



COMPLETE REMOVAL & REPLACEMENT

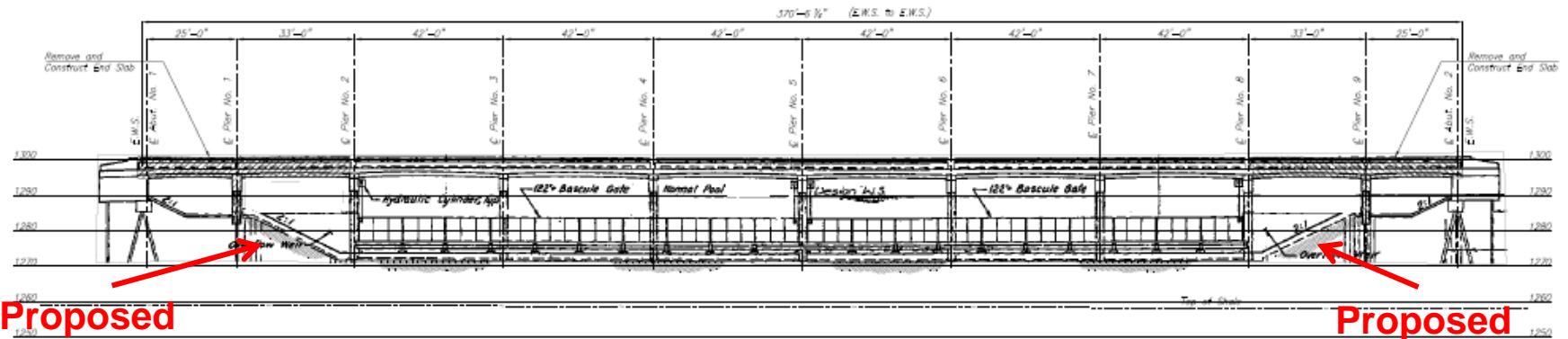




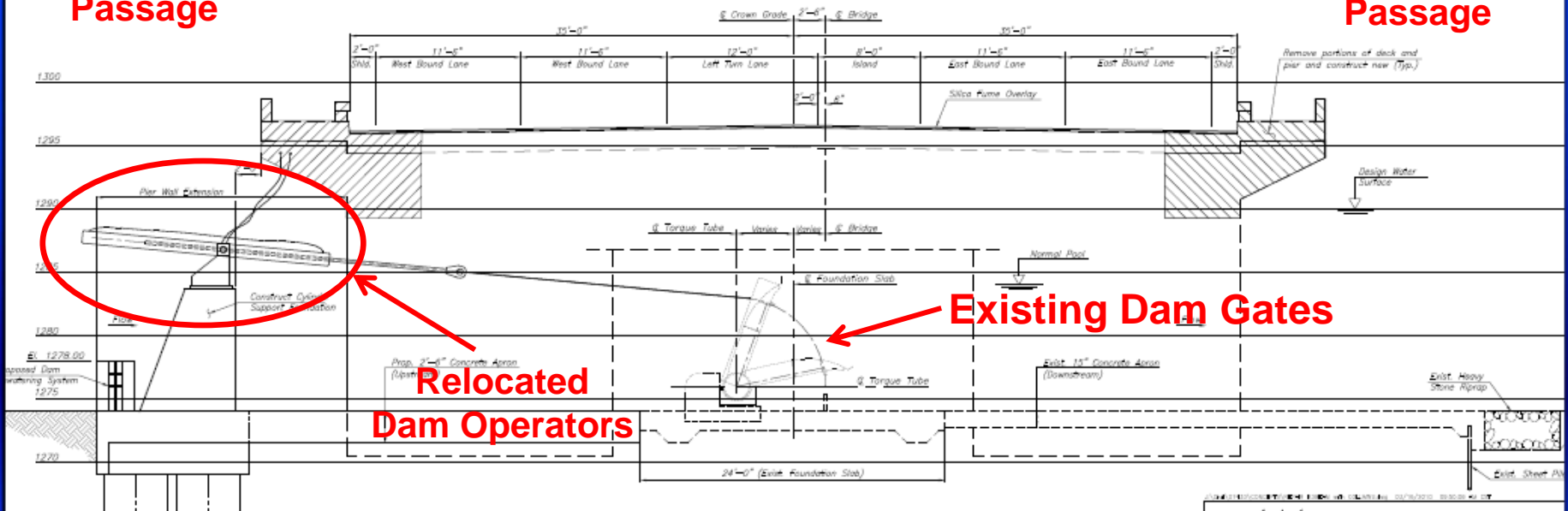


**Hydraulic Cylinders
Attached to Piers**

BRIDGE AND DAM REHAB



ELEVATION



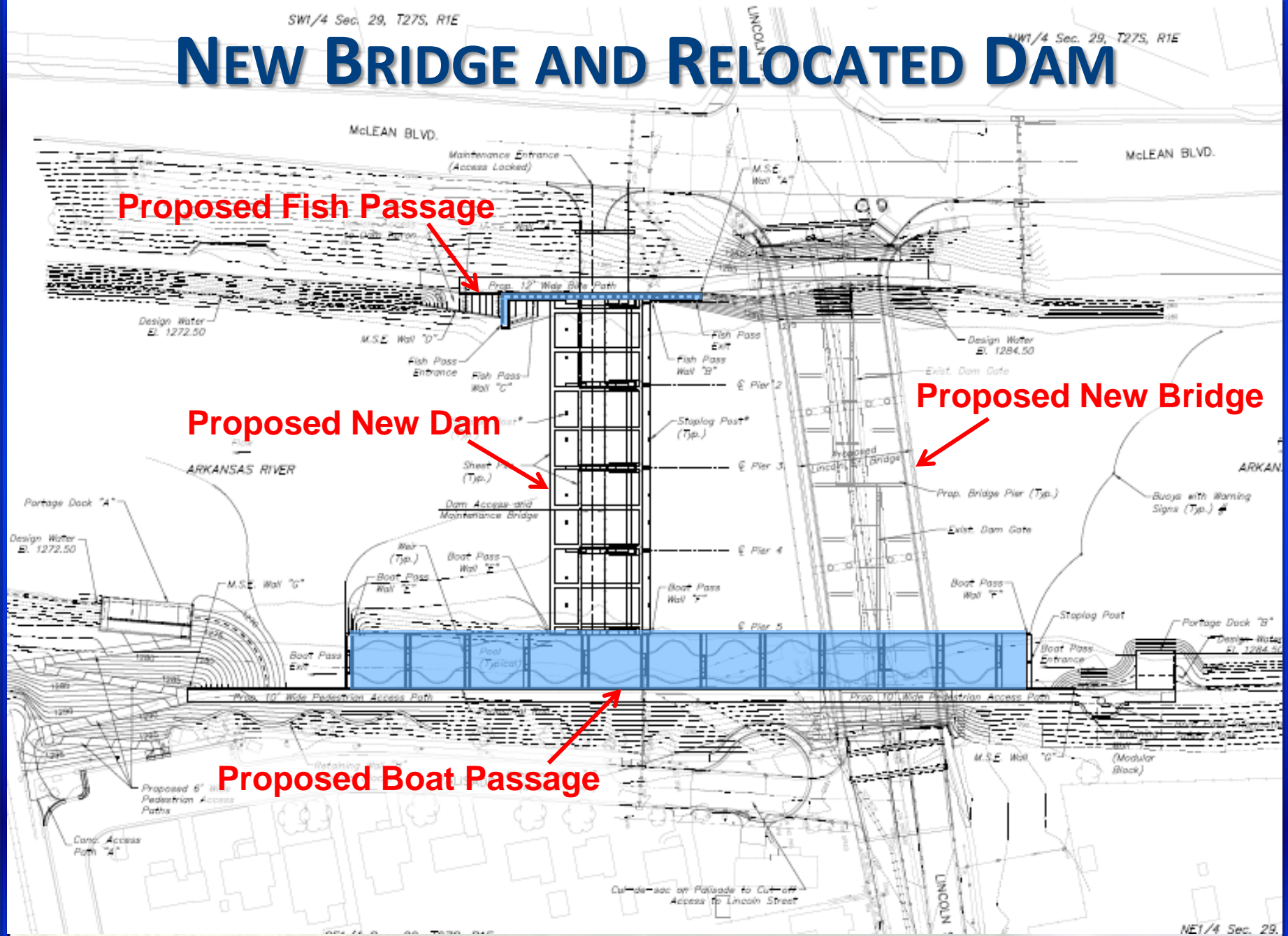
PROPOSED DAM RELOCATION



SW1/4 Sec. 29, T27S, R1E

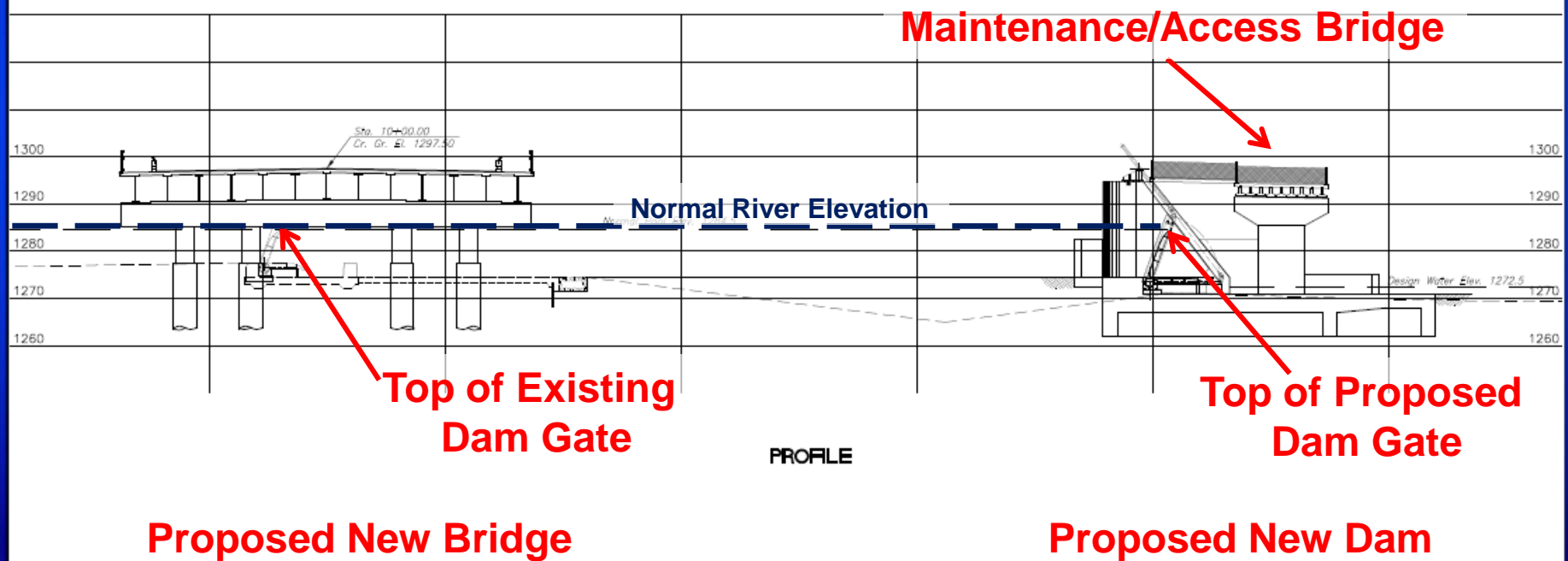
NW1/4 Sec. 29, T27S, R1E

NEW BRIDGE AND RELOCATED DAM

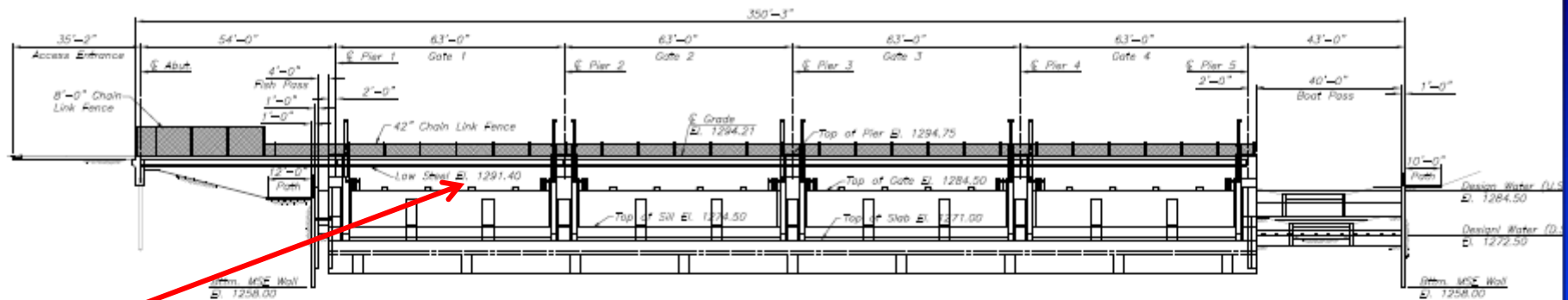


NE1/4 Sec. 29.

NEW BRIDGE & DAM PROFILE



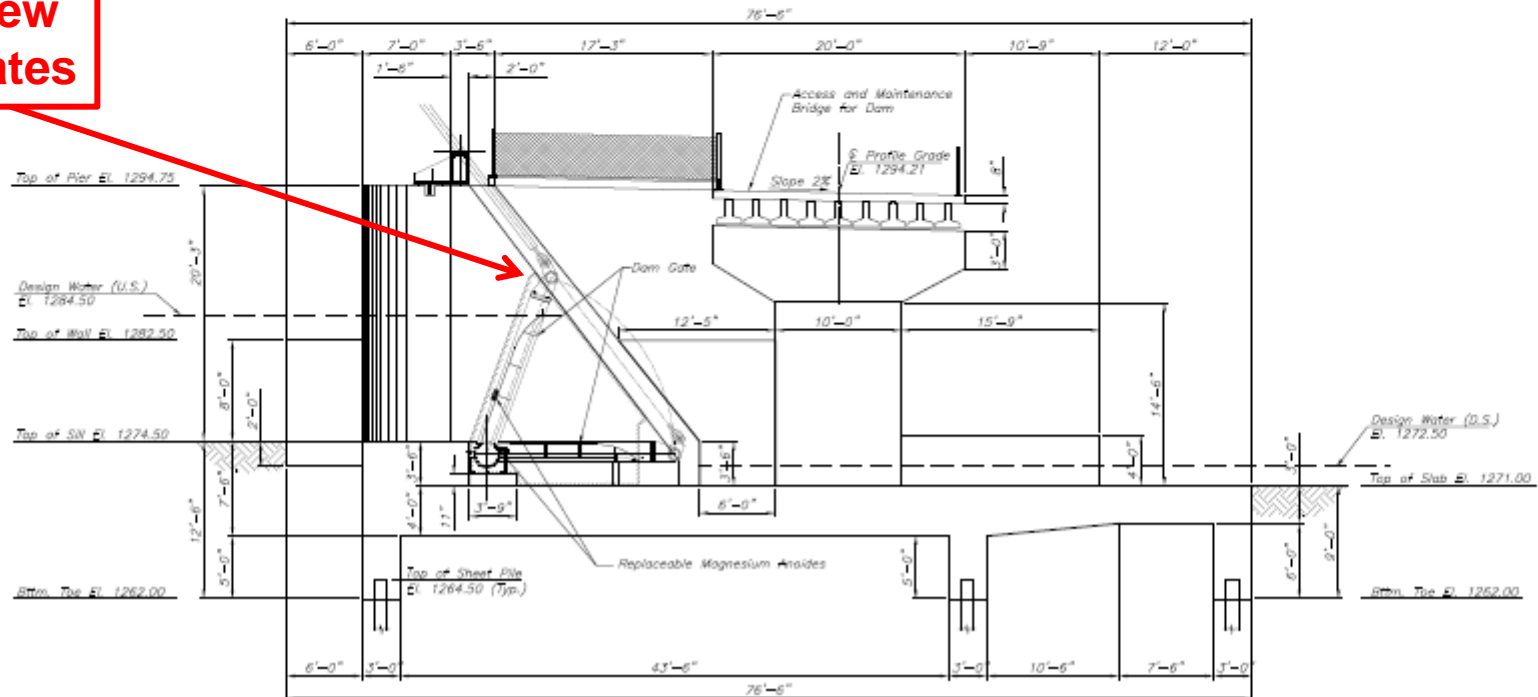
PROPOSED NEW DAM PROFILE

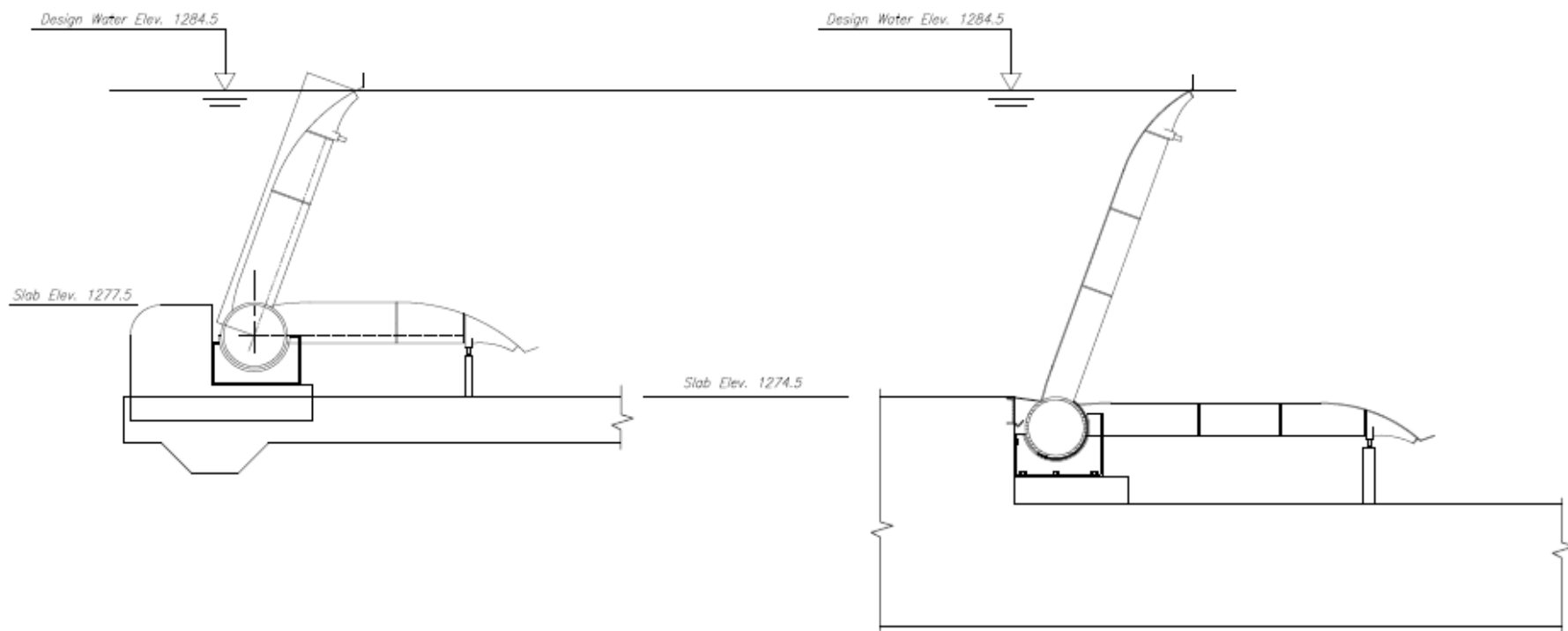


DAM - SOUTH ELEVATION

SCALE 1" = 10'

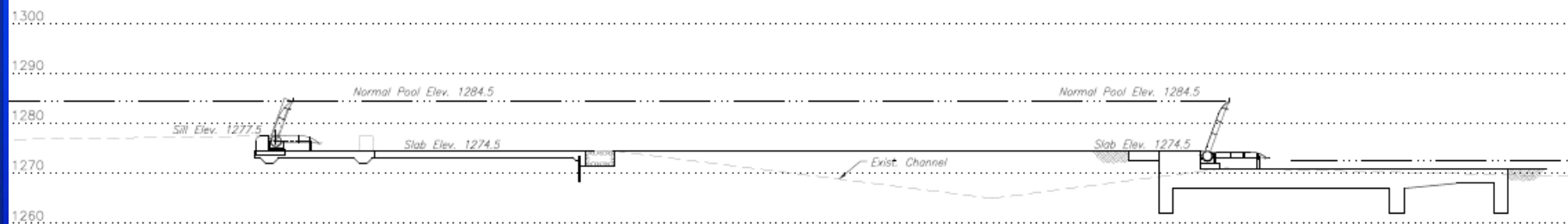
Four New Gates





EXISTING DAM STRUCTURE

NEW DAM STRUCTURE



EXISTING DAM STRUCTURE

NEW DAM STRUCTURE

PROFILE

NORMAL RIVER ELEVATION



NORMAL RIVER ELEVATION



RIVER @ FLOOD STAGE



PERMIT REQUIREMENT SUMMARY

 *U.S. ARMY CORPS OF ENGINEERS – SECTION 404 INDIVIDUAL PERMIT*

 *KANSAS DEPARTMENT OF AGRICULTURE – DIVISION OF WATER RESOURCES OBSTRUCTION IN STREAMS PERMIT*

 **THE STATE OF KANSAS' ENVIRONMENTAL COORDINATOR REQUIRES DWR TO CONTACT THE FOLLOWING AGENCIES**

-  KANSAS BIOLOGICAL SURVEY
-  KANSAS CORPORATION COMMISSION
-  KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
-  KANSAS FOREST SERVICE
-  STATE CONSERVATION COMMISSION
-  KANSAS STATE HISTORICAL SOCIETY

 **IN PROCESS/WAITING ON 'OFFICE CHECK' PLANS TO COMPLETE SUBMISSION**

PERMIT REQUIREMENT SUMMARY



KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT – NPDES **NOTICE OF INTENT**

 **STANDARD PERMIT FOR ALL PROJECTS THAT DISTURB MORE THAN ONE ACRE**

KANSAS DEPARTMENT OF WILDLIFE AND PARKS – ACTION **PERMIT**

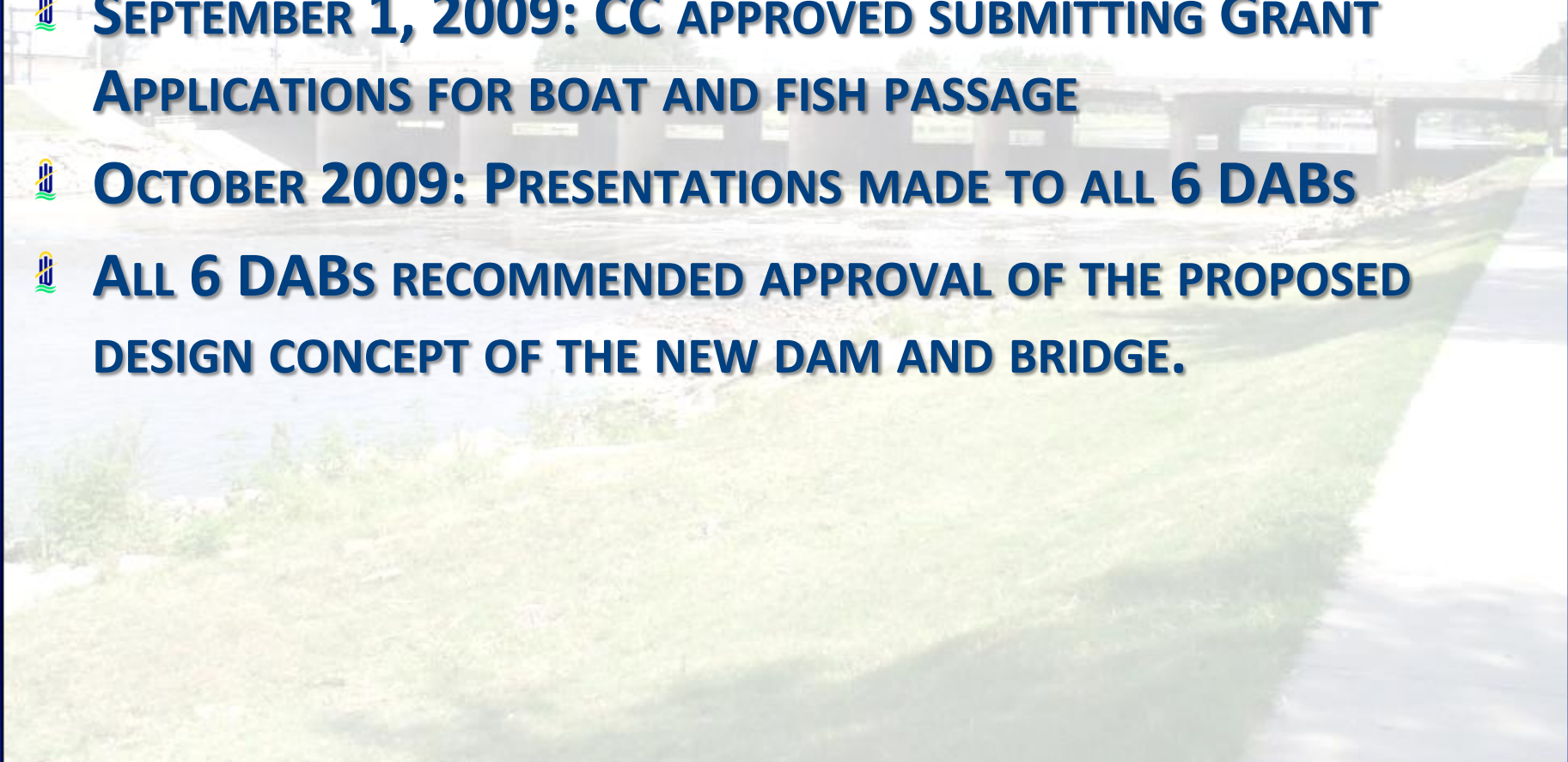




 **WE ARE WORKING EXTENSIVELY WITH**

 **REGIONAL FISHERIES AND WILDLIFE SUPERVISOR, AND**

 **STATE CHIEF OF THE FISHERIES SECTION**

 **IN PROCESS, BUT IS NOT A LENGTHY PROCEDURE**

BACKGROUND

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-  **OCTOBER 27, 2007: CC APPROVED A CONTRACT WITH MKEC TO PREPARE DESIGN CONCEPTS**
 -  **SEPTEMBER 1, 2009: CC APPROVED SUBMITTING GRANT APPLICATIONS FOR BOAT AND FISH PASSAGE**
 -  **OCTOBER 2009: PRESENTATIONS MADE TO ALL 6 DABs**
 -  **ALL 6 DABs RECOMMENDED APPROVAL OF THE PROPOSED DESIGN CONCEPT OF THE NEW DAM AND BRIDGE.**

FINANCIAL CONSIDERATIONS

 **CURRENT CIP BUDGET: \$11,800,000**

 **CITY SHARE: \$7,000,000 (G.O. BONDS)**

 **FEDERAL GRANTS: \$4,800,000 (FOR BRIDGE REHAB/RECONSTRUCTION)**

 **CURRENT ESTIMATE FOR BRIDGE AND DAM REHABILITATION, IN-PLACE: \$9,000,000**

 **CURRENT ESTIMATE FOR NEW BRIDGE AND RELOCATED DAM: \$12,000,000**

 **GRANT FUNDING FISH PASSAGE: \$175,000**

 **GRANT FUNDING BOAT PASSAGE: PENDING – PROS PLAN?**

CONCLUSION



STAFF RECOMMENDS NEW BRIDGE AND RELOCATED DAM.



PRESENT AT NEXT AVAILABLE COUNCIL MEETING FOR APPROVAL OF CONCEPT AND ADDITIONAL DESIGN FUNDING.